

Refine Search

Search Results -

| Terms | Documents |
|-------------|-----------|
| L16 and L17 | 13 |

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L18

Refine Search

Recall Text

Clear

Interrupt

Search History

DATE: Wednesday, April 07, 2004 [Printable Copy](#) [Create Case](#)

| <u>Set Name</u> side by side | <u>Query</u> | <u>Hit Count</u> | <u>Set Name</u> result set |
|--|--------------------------|------------------|-------------------------------|
| DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR | | | |
| <u>L18</u> | l16 and L17 | 13 | <u>L18</u> |
| <u>L17</u> | train or locomotive | 339180 | <u>L17</u> |
| <u>L16</u> | l14 and L15 | 13 | <u>L16</u> |
| <u>L15</u> | \$synchronous\$ | 358745 | <u>L15</u> |
| <u>L14</u> | l12 and L13 | 13 | <u>L14</u> |
| <u>L13</u> | communicat\$ | 2211974 | <u>L13</u> |
| <u>L12</u> | l10 and L11 | 13 | <u>L12</u> |
| <u>L11</u> | transmi\$ | 1757151 | <u>L11</u> |
| <u>L10</u> | l8 and L9 | 14 | <u>L10</u> |
| <u>L9</u> | digital\$ near control\$ | 42183 | <u>L9</u> |
| <u>L8</u> | l6 and L7 | 14 | <u>L8</u> |
| <u>L7</u> | authentic\$ or valid\$ | 283683 | <u>L7</u> |
| <u>L6</u> | l4 and L5 | 19 | <u>L6</u> |
| <u>L5</u> | command | 506679 | <u>L5</u> |

| | |
|-----------|----------------------|
| <u>L4</u> | l2 and L3 |
| <u>L3</u> | client adj program\$ |
| <u>L2</u> | model adj rail\$ |
| <u>L1</u> | 6676089.pn. |

| | |
|------|-----------|
| 19 | <u>L4</u> |
| 4296 | <u>L3</u> |
| 1805 | <u>L2</u> |
| 2 | <u>L1</u> |

END OF SEARCH HISTORY

Hit List

| | | | | |
|---------------|---------------------|-------|----------|-----------|
| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs |
| Generate OACS | | | | |

Search Results - Record(s) 1 through 13 of 13 returned.

☐ 1. Document ID: US 20040011241 A1

L18: Entry 1 of 13

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040011241
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040011241 A1

TITLE: Model train control system

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|--------------------|----------|-------|---------|---------|
| Katzer, Matthew A. | Portland | OR | US | |

APPL-NO: 10/ 340522 [PALM]
DATE FILED: January 10, 2003

RELATED-US-APPL-DATA:

Application 10/340522 is a continuation-of US application 10/124878, filed April 17, 2002, US Patent No. 6530329

INT-CL: [07] B61 L 3/00

US-CL-PUBLISHED: 105/1.5; 246/167.00R, 246/197, 246/62
US-CL-CURRENT: 105/1.5; 246/167R, 246/197, 246/62

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 2. Document ID: US 20030001050 A1

L18: Entry 2 of 13

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030001050

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030001050 A1

TITLE: Model train control system

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|--------------------|----------|-------|---------|---------|
| Katzer, Matthew A. | Portland | OR | US | |

APPL-NO: 10/ 226040 [PALM]

DATE FILED: August 21, 2002

RELATED-US-APPL-DATA:

Application 10/226040 is a continuation-of US application 09/585297, filed June 1, 2000, US Patent No. 6202215

Application 10/226040 is a continuation-of US application 09/541926, filed April 3, 2000, US Patent No. 6270040

INT-CL: [07] B61 L 1/00

US-CL-PUBLISHED: 246/1.00R

US-CL-CURRENT: 246/1R

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 3. Document ID: US 20020170458 A1

L18: Entry 3 of 13

File: PGPB

Nov 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020170458
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020170458 A1

TITLE: Model train control system

PUBLICATION-DATE: November 21, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|--------------------|----------|-------|---------|---------|
| Katzer, Matthew A. | Portland | OR | US | |

APPL-NO: 10/ 124878 [PALM]
DATE FILED: April 17, 2002

RELATED-US-APPL-DATA:

Application 10/124878 is a continuation-of US application 09/858222, filed May 15, 2001, PENDING

INT-CL: [07] B61 D 17/00

US-CL-PUBLISHED: 105/1.5

US-CL-CURRENT: 105/1.5

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Des |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|-----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|-----------|

☐ 4. Document ID: US 20020113171 A1

L18: Entry 4 of 13

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020113171
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020113171 A1

TITLE: Model train control system

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|--------------------|----------|-------|---------|---------|
| Katzer, Matthew A. | Portland | OR | US | |

APPL-NO: 09/ 858297 [PALM]

DATE FILED: May 15, 2001

RELATED-US-APPL-DATA:

Application 09/858297 is a continuation-of US application 09/541926, filed April 3, 2000, PATENTED

INT-CL: [07] B61 L 25/02

US-CL-PUBLISHED: 246/124

US-CL-CURRENT: 246/124

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Drawn De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☒ 5. Document ID: US 20020111723 A1

L18: Entry 5 of 13

File: PGPB

Aug 15, 2002

PGPUB-DOCUMENT-NUMBER: 20020111723

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020111723 A1

TITLE: Model train control system

PUBLICATION-DATE: August 15, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|--------------------|----------|-------|---------|---------|
| Katzer, Matthew A. | Portland | OR | US | |

APPL-NO: 09/ 858222 [PALM]

DATE FILED: May 15, 2001

RELATED-US-APPL-DATA:

Application 09/858222 is a continuation-of US application 09/550904, filed April 17, 2000, US Patent No. 6267061

INT-CL: [07] G06 F 17/00

US-CL-PUBLISHED: 701/19; 105/1.5

US-CL-CURRENT: 701/19; 105/1.5

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☒ 6. Document ID: US 6702235 B2

L18: Entry 6 of 13

File: USPT

Mar 9, 2004

US-PAT-NO: 6702235

DOCUMENT-IDENTIFIER: US 6702235 B2

TITLE: Model train control system

DATE-ISSUED: March 9, 2004

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | 97229 | |

APPL-NO: 10/ 226040 [PALM]

DATE FILED: August 21, 2002

PARENT-CASE:

This is a continuation of U.S. application Ser. No. 09/858,297, filed May 15, 2001 now U.S. Pat. No. 6,494,408, for MODEL TRAIN CONTROL SYSTEM., which is a continuation of U.S. application Ser. No. 09/541,926, filed Apr. 3, 2000, now U.S. Pat. No. 6,270,040 for MODEL TRAIN CONTROL SYSTEM.

INT-CL: [07] G05 D 1/00

US-CL-ISSUED: 246/1R; 701/19
US-CL-CURRENT: 246/1R; 701/19

FIELD-OF-SEARCH: 246/1R, 246/3, 246/5, 246/167R, 246/187A, 340/146.2, 340/500, 340/540, 340/825, 340/825.01, 340/825.03, 340/825.06, 340/825.07, 340/825.22, 340/825.52, 340/286.01, 340/286.02, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|----------------|------------------|--------|
| <u>3944986</u> | March 1976 | Staples | |
| <u>3976272</u> | August 1976 | Murray et al. | |
| <u>4307302</u> | December 1981 | Russell | |
| <u>4853883</u> | August 1989 | Nickles et al. | |
| <u>5072900</u> | December 1991 | Malon | |
| <u>5475818</u> | December 1995 | Molyneaux et al. | |
| <u>5493642</u> | February 1996 | Dunsmuir et al. | |
| <u>5681015</u> | October 1997 | Kull | |
| <u>5696689</u> | December 1997 | Okumura et al. | |
| <u>5787371</u> | July 1998 | Balukin et al. | |
| <u>5828979</u> | October 1998 | Polivka et al. | |
| <u>5896017</u> | April 1999 | Severson et al. | |
| <u>5940005</u> | August 1999 | Severson et al. | |
| <u>5952797</u> | September 1999 | Rossler | |
| <u>6065406</u> | May 2000 | Katzer | |
| <u>6494408</u> | December 2002 | Katzer | 246/1R |

ART-UNIT: 3617

PRIMARY-EXAMINER: Le; Mark T.

ATTY-AGENT-FIRM: Chernoff Vilhauer McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

27 Claims, 13 Drawing figures

☒ 7. Document ID: US 6676089 B1

L18: Entry 7 of 13

File: USPT

Jan 13, 2004

US-PAT-NO: 6676089

DOCUMENT-IDENTIFIER: US 6676089 B1

TITLE: Model train control system

DATE-ISSUED: January 13, 2004

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | 97229 | |

APPL-NO: 09/ 311936 [PALM]

DATE FILED: May 14, 1999

PARENT-CASE:

This application is a Continuation of U.S. patent application Ser. No. 09/104,416 filed Jun. 25, 1998 now U.S. Pat. No. 6,065,406.

INT-CL: [07] G05 D 1/00

US-CL-ISSUED: 246/1R; 201/19, 340/146.2

US-CL-CURRENT: 246/1R; 201/19, 340/146.2

FIELD-OF-SEARCH: 246/1R, 246/167R, 246/3, 246/5, 246/187A, 201/19, 340/146.2, 340/500, 340/540, 340/825, 340/825.01, 340/825.03, 340/825.06, 340/825.07, 340/825.22, 340/825.52, 340/286.01, 340/286.02, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|----------------|------------------|------------|
| <u>4307302</u> | December 1981 | Russell | |
| <u>4853883</u> | August 1989 | Nickles et al. | 364/578 |
| <u>5475818</u> | December 1995 | Molyneaux et al. | 395/200.05 |
| <u>5493642</u> | February 1996 | Dunsmuir et al. | |
| <u>5681015</u> | October 1997 | Kull | 246/187 |
| <u>5787371</u> | July 1998 | Balukin et al. | 701/19 |
| <u>5896017</u> | April 1999 | Severson et al. | |
| <u>5940005</u> | August 1999 | Severson et al. | |
| <u>5952797</u> | September 1999 | Rossler | |
| <u>6065406</u> | May 2000 | Katzer | 105/1.4 |
| <u>6267061</u> | July 2001 | Katzer | 105/1.4 |
| <u>6270040</u> | August 2001 | Katzer | 201/19 |

OTHER PUBLICATIONS

Chappell, Understanding Active X and OLE, 1996, pp. 1-329, published by Microsoft Press.

ART-UNIT: 3669

PRIMARY-EXAMINER: Cuchlinski, Jr.; William A.

ASSISTANT-EXAMINER: Hernandez; Olga

ATTY-AGENT-FIRM: Chernoff Vilhauer McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

47 Claims, 12 Drawing figures

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|----------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Abstract | Claims | KWMC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|----------|--------|------|---------|

☒ 8. Document ID: US 6530329 B2

L18: Entry 8 of 13

File: USPT

Mar 11, 2003

US-PAT-NO: 6530329

DOCUMENT-IDENTIFIER: US 6530329 B2

TITLE: Model train control system

DATE-ISSUED: March 11, 2003

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | 97229 | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|--------------------|-----------|-------|----------|---------|-----------|
| Katzer; Matthew A. | Hillsboro | OR | | | 04 |

APPL-NO: 10/ 124878 [PALM]

DATE FILED: April 17, 2002

PARENT-CASE:

This application is a continuation of U.S. patent application Ser. No. 09/858,222 filed on Apr. 17, 2002 U.S. Pat. No. 6,460,467.

INT-CL: [07] A63 H 19/00

US-CL-ISSUED: 105/1.5; 246/167R, 246/197, 246/62
US-CL-CURRENT: 105/1.5; 246/167R, 246/197, 246/62

FIELD-OF-SEARCH: 105/1.5, 105/1.4, 105/29.2, 246/187A, 246/167R, 246/197, 246/62, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|----------------|------------------|----------|
| <u>3944986</u> | March 1976 | Staples | |
| <u>3976272</u> | August 1976 | Murray et al. | |
| <u>4307302</u> | December 1981 | Russell | |
| <u>4853883</u> | August 1989 | Nickles et al. | 348/121 |
| <u>5072900</u> | December 1991 | Malon | |
| <u>5475818</u> | December 1995 | Molyneaux et al. | 701/20 |
| <u>5493642</u> | February 1996 | Dunsmuir et al. | |
| <u>5638522</u> | June 1997 | Dunsmuir et al. | |
| <u>5681015</u> | October 1997 | Kull | 246/167R |
| <u>5696689</u> | December 1997 | Okumura et al. | |
| <u>5787371</u> | July 1998 | Balukin et al. | 246/187A |
| <u>5828979</u> | October 1998 | Ploivka et al. | |
| <u>5896017</u> | April 1999 | Severson et al. | |
| <u>5940005</u> | August 1999 | Severson et al. | |
| <u>5952797</u> | September 1999 | Rossler | |
| <u>6065406</u> | May 2000 | Katzer | 105/1.4 |
| <u>6267061</u> | July 2001 | Katzer | |
| <u>6270040</u> | August 2001 | Katzer | |

OTHER PUBLICATIONS

Chapell, David, Understanding ActiveX and OLE, 1996, Microsoft Press, Redmond.

ART-UNIT: 3661

PRIMARY-EXAMINER: Cuchlinski, Jr.; William A.

ASSISTANT-EXAMINER: Hernandez; Olga

ATTY-AGENT-FIRM: Chernoff, Vilhauer, McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth

commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

27 Claims, 3 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Abstract | Claims | FIGS | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|----------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|----------|--------|------|---------|

☐ 9. Document ID: US 6494408 B2

L18: Entry 9 of 13

File: USPT

Dec 17, 2002

US-PAT-NO: 6494408

DOCUMENT-IDENTIFIER: US 6494408 B2

TITLE: Model train control system

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | 97229 | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|--------------------|-----------|-------|----------|---------|-----------|
| Katzer; Matthew A. | Hillsboro | OR | | | 04 |

APPL-NO: 09/ 858297 [PALM]

DATE FILED: May 15, 2001

PARENT-CASE:

This is a continuation of U.S. application Ser. No. 09/541,926, filed Apr. 3, 2000, now U.S. Pat. No. 6,270,040, for MODEL TRAIN CONTROL SYSTEM.

INT-CL: [07] G05 D 1/00

US-CL-ISSUED: 246/1R; 701/19

US-CL-CURRENT: 246/1R; 701/19

FIELD-OF-SEARCH: 246/1R, 246/3, 246/5, 246/167R, 246/187A, 340/146.2, 340/500, 340/540, 340/825, 340/825.01, 340/825.03, 340/825.06, 340/825.07, 340/825.22, 340/825.52, 340/286.01, 340/286.02, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|----------------|-------|
| 3944986 | March 1976 | Staples | |
| <u>3976272</u> | August 1976 | Murray et al. | |
| <u>4307302</u> | December 1981 | Russell | |
| <u>4853883</u> | August 1989 | Nickles et al. | |

| | | | |
|----------------|----------------|------------------|--------|
| <u>5072900</u> | December 1991 | Malon | |
| <u>5475818</u> | December 1995 | Molyneaux et al. | |
| <u>5493642</u> | February 1996 | Dunsmuir et al. | |
| <u>5681015</u> | October 1997 | Kull | |
| <u>5696689</u> | December 1997 | Okumura et al. | |
| <u>5787371</u> | July 1998 | Balukin et al. | |
| <u>5828979</u> | October 1998 | Polivka et al. | |
| <u>5896017</u> | April 1999 | Severson et al. | |
| <u>5940005</u> | August 1999 | Severson et al. | |
| <u>5952797</u> | September 1999 | Rossler | |
| <u>6065406</u> | May 2000 | Katzer | |
| <u>6270040</u> | August 2001 | Katzer | 246/1R |

OTHER PUBLICATIONS

Chapell, David. Understanding ActiveX and OLE. Redmond: Microsoft Press, 1996.

ART-UNIT: 3617

PRIMARY-EXAMINER: Le; Mark T.

ATTY-AGENT-FIRM: Chernoff Vilhauer McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

43 Claims, 13 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Examiner | Supervisor | Claims | RMC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|----------|------------|--------|-----|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|----------|------------|--------|-----|---------|

☐ 10. Document ID: US 6460467 B2

L18: Entry 10 of 13

File: USPT

Oct 8, 2002

US-PAT-NO: 6460467

DOCUMENT-IDENTIFIER: US 6460467 B2

TITLE: Model train control method

DATE-ISSUED: October 8, 2002

INVENTOR-INFORMATION:

| | | | | |
|------|------|-------|----------|---------|
| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------|------|-------|----------|---------|

Katzer; Matthew A.

Portland

OR

97229

APPL-NO: 09/ 858222 [PALM]

DATE FILED: May 15, 2001

PARENT-CASE:

This application is a continuation of application Ser. No. 09/550,904 filed Apr. 17, 2000, U.S. Pat. No. 6,267,061.

INT-CL: [07] A63 H 19/00

US-CL-ISSUED: 105/1.5; 105/1.4, 246/197

US-CL-CURRENT: 105/1.5; 105/1.4, 246/197

FIELD-OF-SEARCH: 105/1.5, 105/1.4, 105/29.2, 246/197, 246/62, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|----------------|------------------|---------|
| <u>3944986</u> | March 1976 | Staples | |
| <u>3976272</u> | August 1976 | Murray et al. | |
| <u>4307302</u> | December 1981 | Russell | |
| <u>4853883</u> | August 1989 | Nickles et al. | |
| <u>5072900</u> | December 1991 | Malon | |
| <u>5475818</u> | December 1995 | Molyneaux et al. | |
| <u>5493642</u> | February 1996 | Dunsmuir et al. | 395/161 |
| <u>5638522</u> | June 1997 | Dunsmuir et al. | 395/326 |
| <u>5681015</u> | October 1997 | Kull | |
| <u>5696689</u> | December 1997 | Okumura et al. | |
| <u>5787371</u> | July 1998 | Balukin et al. | |
| <u>5828979</u> | October 1998 | Polivka et al. | |
| <u>5896017</u> | April 1999 | Severson et al. | |
| <u>5940005</u> | August 1999 | Severson et al. | |
| <u>5952797</u> | September 1999 | Rossler | |
| <u>6065406</u> | May 2000 | Katzer | |
| <u>6267061</u> | July 2001 | Katzer | 105/1.4 |

ART-UNIT: 3661

PRIMARY-EXAMINER: BeauLieu; Yonel

ASSISTANT-EXAMINER: Hernandez; Olga

ATTY-AGENT-FIRM: Russell; Kevin L. Chernoff, Vilhaure, McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface

through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

54 Claims, 3 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Abstract | Abstract | Claims | KWIC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|----------|----------|--------|------|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|----------|----------|--------|------|---------|

☐ 11. Document ID: US 6270040 B1

L18: Entry 11 of 13

File: USPT

Aug 7, 2001

US-PAT-NO: 6270040

DOCUMENT-IDENTIFIER: US 6270040 B1

TITLE: Model train control system

DATE-ISSUED: August 7, 2001

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|----------------|----------|-------|----------|---------|-----------|
| KAM Industries | Portland | OR | | | 02 |

APPL-NO: 09/ 541926 [PALM]

DATE FILED: April 3, 2000

INT-CL: [07] G05 D 1/00

US-CL-ISSUED: 246/1R; 201/19

US-CL-CURRENT: 246/1R; 201/19

FIELD-OF-SEARCH: 246/1R, 246/3, 246/5, 246/167R, 246/187A, 340/146.2, 340/500, 340/540, 340/825, 340/825.01, 340/825.03, 340/825.06, 340/825.07, 340/825.22, 340/825.52, 340/286.01, 340/286.02, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|-------------|----------------|-----------|
| <u>3944986</u> | March 1976 | Staples | 340/172.5 |
| <u>3976272</u> | August 1976 | Murray et al. | 246/5 |
| <u>4853883</u> | August 1989 | Nickles et al. | |

| | | | |
|----------------|---------------|------------------|------------|
| <u>5072900</u> | December 1991 | Malon | 246/5 |
| <u>5475818</u> | December 1995 | Molyneaux et al. | |
| <u>5681015</u> | October 1997 | Kull | |
| <u>5696689</u> | December 1997 | Okumura et al. | 707/19 |
| <u>5787371</u> | July 1998 | Balukin et al. | |
| <u>5828979</u> | October 1998 | Polivka et al. | 246/5 |
| <u>5940005</u> | August 1999 | Severson et al. | 340/825.52 |
| <u>6065406</u> | May 2000 | Katzer | 701/19 |

OTHER PUBLICATIONS

David Chappell, Understanding ActiveX and Ole from Strategic Technology Series, 1996.

ART-UNIT: 367

PRIMARY-EXAMINER: Le; Mark T.

ATTY-AGENT-FIRM: Chernoff, Vilhauer McClung, Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

235 Claims, 13 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Examination | Interference | Claims | KMC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|-------------|--------------|--------|-----|---------|
|------|-------|----------|-------|--------|----------------|------|-----------|-------------|--------------|--------|-----|---------|

☐ 12. Document ID: US 6267061 B1

L18: Entry 12 of 13

File: USPT

Jul 31, 2001

US-PAT-NO: 6267061

DOCUMENT-IDENTIFIER: US 6267061 B1

TITLE: Model train control system

DATE-ISSUED: July 31, 2001

INVENTOR-INFORMATION:

| | | | | |
|--------------------|----------|-------|----------|---------|
| NAME | CITY | STATE | ZIP CODE | COUNTRY |
| Katzer; Matthew A. | Portland | OR | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|----------------|-----------|-------|----------|---------|-----------|
| KAM Industries | Hillsboro | OR | | | 02 |

APPL-NO: 09/ 550904 [PALM]
DATE FILED: April 17, 2000

PARENT-CASE:

This Patent Application is a continuation in part of application Ser. No. 09/104,461, filed Jun. 24, 1998, now U.S. Pat. No. 6,065,406.

INT-CL: [07] A63 H 19/00

US-CL-ISSUED: 105/1.5; 105/1.4, 105/29.2, 701/19, 701/20, 246/62, 246/297
US-CL-CURRENT: 105/1.5; 105/1.4, 105/29.2, 246/297, 246/62, 701/19, 701/20

FIELD-OF-SEARCH: 105/1.5, 105/1.4, 105/29.2, 246/197, 246/62, 701/19, 701/20

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|------------------|---------|
| <u>4853883</u> | August 1989 | Nickles et al. | |
| <u>5475818</u> | December 1995 | Molyneaux et al. | |
| <u>5681015</u> | October 1997 | Kull | |
| <u>5787371</u> | July 1998 | Balukin et al. | |
| <u>6065406</u> | May 2000 | Katzer | 105/1.5 |

OTHER PUBLICATIONS

David Chappell, Understanding Activex and Ole from Strategic Technology Series, pp. 1-329; at least, one year prior to filing date.

ART-UNIT: 361

PRIMARY-EXAMINER: Cuchlinski, Jr.; William A.

ASSISTANT-EXAMINER: Hernandez; Olga

ATTY-AGENT-FIRM: Chernoff, Vilhauer, McClung & Stenzel, LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

54 Claims, 3 Drawing figures

☒ 13. Document ID: US 6065406 A

L18: Entry 13 of 13

File: USPT

May 23, 2000

US-PAT-NO: 6065406

DOCUMENT-IDENTIFIER: US 6065406 A

TITLE: Model train control system

DATE-ISSUED: May 23, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Katzer; Matthew A. | Portland | OR | 97229 | |

APPL-NO: 09/ 104461 [PALM]

DATE FILED: June 24, 1998

INT-CL: [07] A63 H 19/00

US-CL-ISSUED: 105/1.5; 105/1.4, 105/29.2, 246/197, 246/62, 701/19, 701/20

US-CL-CURRENT: 105/1.5; 105/1.4, 105/29.2, 246/197, 246/62, 701/19, 701/20

FIELD-OF-SEARCH: 701/19, 701/20, 246/62, 246/197, 105/1.5, 105/1.4, 105/29.2

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|------------------|------------|
| <u>4853883</u> | August 1989 | Nickles et al. | 395/500.29 |
| <u>5475818</u> | December 1995 | Molyneaux et al. | 709/208 |
| <u>5681015</u> | October 1997 | Kull | 246/187C |
| <u>5787371</u> | July 1998 | Balukin et al. | 701/19 |

OTHER PUBLICATIONS

Understanding ActiveX.TM. and OLE copyright .COPYRGT. 1996 by David Chapell, published in 1996 by Microsoft Press; 329 pages.

ART-UNIT: 361

PRIMARY-EXAMINER: Cuchlinski, Jr.; William A.

ASSISTANT-EXAMINER: Hernandez; Olga

ATTY-AGENT-FIRM: Russell; Kevin L. Chernoff Vilhauer McClung & Stenzel LLP

ABSTRACT:

A system which operates a digitally controlled model railroad transmitting a first command from a first client program to a resident external controlling interface through a first communications transport. A second command is transmitted from a second client program to the resident external controlling interface through a second communications transport. The first command and the second command are received by the resident external controlling interface which queues the first and second commands. The resident external controlling interface sends third and fourth commands representative of the first and second commands, respectively, to a digital command station for execution on the digitally controlled model railroad.

53 Claims, 3 Drawing figures

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|---------|----------|--------|-----|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Summary | Abstract | Claims | KWC | Draw De |
|------|-------|----------|-------|--------|----------------|------|-----------|---------|----------|--------|-----|---------|

| | | | | | |
|-------|---------------------|-------|----------|-----------|---------------|
| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS |
|-------|---------------------|-------|----------|-----------|---------------|

| | |
|-------------|-----------|
| Terms | Documents |
| L16 and L17 | 13 |

Display Format:

[Previous Page](#) [Next Page](#) [Go to Doc#](#)